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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|------------------------|---------------------|------------------|
| 10/727,586 | 12/05/2003 | Mats Petter Pettersson | 3782-0277P | 7349 |

2292 7590 02/23/2005

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

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| EXAMINER |
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FRANKLIN, JAMARA ALZAIDA

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| ART UNIT | PAPER NUMBER |
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2876

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|---------------------------------------|--|--|
| Office Action Summary | Application No. 10/727,586 | Applicant(s) PETTERSSON ET AL. | |
| | Examiner Jamara A. Franklin | Art Unit 2876 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,13-28,31,32,35,38-40,42,43,53 and 54 is/are rejected.
- 7) ☒ Claim(s) 2-12,29,30,33,34,36,37,41 and 44-52 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>12/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Acknowledgment is made of the preliminary amendment received on 12/05/03. Claims 1-54 are currently pending.

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: A coding pattern and apparatus and method for determining data values in the coding pattern.

2. Claim 12 is objected to because of the following informalities:

in claim 12, line 1, substitute "method " with --product--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 13-28, 31, 32, 35, 38-40, 42, 43, 53, and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Hecht et al. (US 5,449,895) (hereinafter referred to as 'Hecht').

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Hecht (cited by applicant) teaches an apparatus and a method for determining a set of data values based on a number of marks in a subset (one of the plurality of subpatterns 33) of a coding pattern (glyph code 31) on a product which comprises: a grid formation comprising a first plurality of grid points; and a second plurality of marks (glyphs 34), each grid point being assigned at least one mark and representing a value by way of the relative location of said at least one mark (col. 6, lines 6-12), said apparatus and method comprising: means for detecting the grid points in the subset; means for detecting the marks in the subset; means for associating each detected mark with one of the detected grid points; and means for determining the location of each detected mark relative to the thus-associated grid point (col. 6, lines 31-49);

the apparatus and method comprising: means for determining a data value for each grid point based on the location of each associated mark relative to the grid point;

the product wherein all the marks have an essentially identical appearance;

the product wherein the marks are approximately circular, triangular, or rectangular;

the product wherein the coding pattern lacks reference marks for defining the grid formation;

the product wherein the grid formation is virtual;

the product wherein the grid points is identifiable by means of the marks only;

the product wherein the grid formation comprises a set of tiles cell units, each cell unit being defined by at least three grid points, and each grid point being part of at least three cell units;

the product wherein the distance between the grid points is about 250 micrometers and 200 micrometers;

the product wherein the grid formation is a rectangular grid;

the product wherein the marks are optically readable;

the product wherein the grid formation is optically readable;

the product wherein the grid formation defines a coded surface area of the product, the collective surface area of the second plurality of marks constituting 0.25% to 20% of the coded surface area; and

the product which comprises a sheet of paper (see figure 2).

Allowable Subject Matter

5. Claims 2-12, 29, 30, 33, 34, 36, 37, 41, and 44-52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to teach, or fairly suggest either alone or in combination thereof,

a product wherein first and second combinations of the grid points code a first and a second position, respectively, in at least one direction on the product, the second combination containing a portion of the grid points of the first combination;

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the product wherein each combination of grid points in accordance with a predetermined combination rule represents at least two sets of digits, one of said sets defining a first position coordinate on the product; and

the method in which determining the relative location of the at least one mark comprises searching for the mark at a predetermined distance from one of the detected grid points and calculating the center of gravity of each mark.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Sterns et al. (US 5,128,525) teach a convolution filtering for decoding self-clocking glyph shape codes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamara A. Franklin whose telephone number is (571) 272-2389. The examiner can normally be reached on Monday through Friday 8:00am to 4:30pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jamara A. Franklin
Examiner
Art Unit 2876

JAF
February 14, 2005


DIANE I. LEE
PRIMARY EXAMINER